

ANM-00-263-A
TAE
Elec. SYSTEM
SEE-ANM-00-0872

ARAC ESHWG REPORT 25.1431(d)

1 - What is underlying safety issue addressed by the FAR/JAR?

JAR specifies requirements relating to the design and installation of electronic equipment such that these may not cause essential loads to malfunction. There is no equivalent FAR.

2 - What are the current FAR and JAR standards?

Current FAR text:

There is no current FAR rules text.

Current JAR text:

JAR 25.1431 Electronic Equipment

- (d) Electronic equipment must be designed and installed such that it does not cause essential loads to become inoperative, as a result of electrical power supply transients or transients from other causes.

3 - What are the differences in the standards and what do these differences result in?

There is no equivalent FAR. JAR requires additional verification that any electronic equipment will not cause essential loads to become inoperative as a result of electrical power supply transients or transients from other causes.

4 - What, if any, are the differences in the means of compliance?

Since there are no equivalent FAR standards, additional verification is required by JAR that electronic equipment will not cause essential loads to become inoperative as a result of electrical power supply transients or transients from other causes.

5 - What is the proposed action?

The proposed action is to adopt JAR 25.1431(d).

6 - What should the harmonized standard be?

FAR/JAR 25.1431 Electronic Equipment

- (d) Electronic equipment must be designed and installed such that it does not cause essential loads to become inoperative, as a result of electrical power supply transients or transients from other causes.

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7 - How does this proposed standard address the underlying safety issue (identified under #1)?

The proposed standard addresses the need for installed electronic equipment to be designed and installed such that essential loads (as defined in JAR25.1309(e)) will not become inoperative as a result of electrical power supply transients or transients from other causes.

8 - Relative to the current FAR, does the proposed standard increase, decrease, or maintain the same level of safety? Explain.

Since this proposal is in line with current industry practices, and it is already included by implication in Sections 25.1309(e), 25.1351(b) and 25.1353(a) it will maintain the same level of safety.

9 - Relative to current industry practice, does the proposed standard increase, decrease, or maintain the same level of safety? Explain.

Since this proposal is in line with current industry practices, and it is already included by implication in Sections 25.1309(e), 25.1351(b) and 25.1353(a), it will maintain the same level of safety.

10 - What other options have been considered and why were they not selected?

Not to adopt the JAR requirements was considered however for the reasons as stated above the group decided to adopt the more specific requirement in accordance with fast track harmonization process.

11 - Who would be affected by the proposed change?

As the proposal is in line with current design practices, the effect is considered to be minimum for aircraft operators and manufacturers affected by this change.

12 - To ensure harmonization, what current advisory material (e.g., ACJ, AMJ, AC, policy letters) needs to be included in the rule text or preamble?

None.

13 - Is existing FAA advisory material adequate? If not, what advisory material should be adopted?

There is no current published FAA Advisory Material.

14 - How does the proposed standard compare to the current ICAO standard?

This proposal is in line with ICAO Annex 8 Chapter 8 Electrical Systems.

15 - Does the proposed standard affect other HWG's?

This proposal does not affect other HWG's.

16 - What is the cost impact of complying with the proposed standard?

As the proposal is in line with current design practices the cost impact will be negligible.

17 - Does the HWG want to review the draft NPRM at "Phase 4" prior to publication in the Federal Register?

Yes.

18 - In light of the information provided in this report, does the HWG consider that the "Fast Track" process is appropriate for this rulemaking project, or is the project too complex or controversial for the Fast Track Process. Explain.

The ESHWG considers that the fast track harmonization process is appropriate for this rule.